



#### What is Giardia?

*Giardia* is sometimes confused with "worms" because they invade the gastrointestinal tract and can cause diarrhea. *Giardia* is a one-celled parasitic species classified as a *protozoa*.

Most dogs that are infected with *Giardia* do not have diarrhea or any other signs of illness. When the eggs (cysts) are found in the stool of a dog without diarrhea, they are generally considered a transient, insignificant finding. However, in puppies and debilitated adult dogs, they may cause severe, watery diarrhea that may be fatal.

# How did my dog get Giardia?

A dog becomes infected with *Giardia* when it swallows the cyst stage of the parasite. Once inside the dog's intestine, the cyst goes through several stages of maturation. Eventually, the dog passes infective cysts in the stool. These cysts lie in the environment and can infect other dogs. *Giardia* may also be transmitted through drinking infected water.

## How is giardiasis diagnosed?

Giardiasis or infection with *Giardia spp.* is diagnosed by performing a microscopic examination of a stool sample. The cysts are quite small and usually require a special floatation medium for detection, so they are not normally found on routine fecal examinations. Occasionally, the parasites may be seen on a direct smear of the feces. Tests are available for detection of antigens (cell proteins) of *Giardia* in the blood or feces. These tests are more accurate than the stool exam, but it may require several days to get a result from the laboratory.



Giardia: 3000 x actual size (after Kofold and Christiansen)

# How is giardiasis treated?

The typical drug used to kill *Giardia* is metronidazole, an antibiotic. It is normally given for five to seven days to treat giardiasis. Other drugs are also used if diarrhea and dehydration occur. If metronidazole is not effective, other medications may be recommended.

### Can humans become infected with Giardia?

*Giardia* can cause diarrhea in humans. If your dog is diagnosed with giardiasis, environmental disinfection is important. The use of diluted chlorine bleach at 1:32 or 1:16 dilutions (one cup in a gallon of water or 500 ml in 4 liters of water) is effective in killing the cysts. *Giardia* cysts are very susceptible to drying. We recommend thoroughly cleaning the pet's living and sleeping areas and then allowing the areas to dry out for several days before reintroducing pets.

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